

## Abstract of the Disclosure

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3        The invention provides a method and system for adaptive point to multi-  
4        point wireless communication. The wireless physical layer and the wireless media-  
5        access-control (MAC) layer collectively include a set of parameters, which are adaptively  
6        modified by a base station controller for communication with a plurality of customer  
7        premises equipment. The base station controller adjusts communication with each cus-  
8        tomer premises equipment individually and adaptively in response to changes in charac-  
9        teristics of communication, including physical characteristics, amount of communication  
10       traffic, and nature of application for the communication traffic.